

I hereby certify that this correspondence is being deposited with the United States Postal Service as "Express Mail Postal Office to Addressee" service in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, "Express Mail" Label No. **EL419747405US**, on May 24, 2001


Tiffany Turner

Date: May 24, 2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

HP Docket No.: 10960787-13

Inventor(s): C. Venkatraman, et. al.

Group Art Unit:

Serial No.:

Examiner:

Filed: Herewith

Title: EMBEDDING WEB ACCESS FUNCTIONALITY INTO A
DEVICE FOR USER INTERFACE FUNCTIONS

Continuation Application of Application

Serial No.: 09/721,409

Filed: November 21, 2000

Continuation Application of Application

Serial No.: 09/387,278

Filed: August 31, 1999

Continuation Application of Application

Serial No.: 08/740,289

Filed: October 25, 1996

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

Sir:

Prior to the examination of the above-referenced application, please amend the application as follows:

IN THE SPECIFICATION

On page 1, line 1, insert:

This application is a continuation of Application No. 09/721,409, filed on November 21, 2000, which is a continuation of Application No. 09/387,278, filed on August 31, 1999, now U.S. Patent No. 6,170,007, which is a continuation of Application No. 08/740,289, filed on October 25, 1996, now U.S. Patent No. 5,956,487.

On page 5, please delete the first paragraph and insert therefor the following:

A solution for providing widely accessible, low cost and enhanced user interface functions for a device is disclosed. The solution involves embedding web access functionality into the device including a web server that provides a device web page. The device includes an embedded network interface that enables access to the device web page by a web browser. A user of the web browser accesses the user interface functions for the device through the device web page. The web server functionality may be implemented with existing circuitry in a device, such as an existing processor, memory, and input/output circuitry that normally perform device-specific functions, thereby avoiding the extra cost and space required for dedicated web server hardware.

Page 11, please delete the second paragraph and insert therefor:

In one embodiment, the device 10 is a printer device wherein the processor 200 and the memory 210 perform image rendering functions and the device-specific hardware 300 includes printer hardware and associated circuitry and wherein the input/output circuitry 220 provides network access to the printer device 10. The web server functionality is embedded into the printer device 10 by providing software or firmware for the processor 200 and by utilizing space available in the memory 210 and by using the existing input/output circuitry 220 such as Ethernet circuitry to transfer HTML files.

Page 12, please delete the second paragraph and inset therefor:

In yet another embodiment, the device 10 is a washing machine wherein the processor 200 and the memory 210 perform functions for controlling wash cycles. The device-specific hardware 300 includes hardware such as motors, valves, sensors, and associated circuitry. The web server functionality is embedded into the washing machine 10 by providing software or firmware for the processor 200 and by utilizing space available in the memory 210 and by adding the input/output circuitry to the device 10.

Page 20, please delete the first paragraph and insert therefor:

The web page 18 for the printer may also include manuals, parts lists, and other associated publications. These publications may be stored within the device 10 in, for example, a nonvolatile memory, or may be referenced elsewhere via hyperlinks contained in the web page 18. These publications contain dynamic information such as updated manuals as well as new and updated software driver routines for the device 10.

IN THE CLAIMS

Please cancel claims 1-32 without prejudice.

Please add the following claims:

33. (New) An apparatus for providing a web page for a copier, the apparatus comprising:

a memory configured to perform copier-specific functions and web server functions, wherein the web server functions include generating a web page that enables copier control functions;

a processor configured to perform copier-specific functions and web server functions, wherein the web server functions include generating the web page that enables copier control functions, the processor being coupled to the memory;

software or firmware executed by the processor to service HTTP protocol and to generate HTML files;

input/output circuitry coupled to the processor; and

wherein the apparatus is embedded in the copier.

34. (New) The apparatus of claim 33 further comprising copier-specific hardware coupled to the processor.

35. (New) The apparatus of claim 33 wherein the processor also performs control and information monitoring and logging functions.

36. (New) The apparatus of claim 33 wherein the processor executes communication software or firmware to drive the input/output circuitry.

37. (New) The apparatus of claim 33 wherein the memory and the processor are on a single integrated circuit chip.
38. (New) The apparatus of claim 33 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.
39. (New) The apparatus of claim 33 wherein the memory is static memory.
40. (New) The apparatus of claim 33 wherein the memory is random access memory.
41. (New) The apparatus of claim 33 wherein the web page is stored in the memory in HTML format.
42. (New) The apparatus of claim 33 wherein the web page is generated on the fly.
43. (New) The apparatus of claim 33 wherein the input/output circuitry is cellular transmitter/receiver circuitry.
44. (New) The apparatus of claim 33 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.
45. (New) The apparatus of claim 33 wherein the web page includes a page title, a header section, a set of ASCII text, a table section, and a set of hyperlinks.

46. (New) The apparatus of claim 33 wherein the web page includes multimedia files.

47. (New) The apparatus of claim 33 wherein the memory includes nonvolatile memory, and wherein the web page includes a manual that is stored the nonvolatile memory.

48. (New) The apparatus of claim 33 wherein the web page includes a hyperlink to an updated manual.

49. (New) The apparatus of claim 33 wherein the web page includes a hyperlink to an updated software driver routine.

50. (New) An apparatus for providing a web page for a printer, the apparatus comprising:

a memory configured to perform printer-specific functions and web server functions, wherein the web server functions include generating a web page that enables printer control functions;

a processor configured to perform printer-specific functions and web server functions, wherein the web server functions include generating the web page that enables printer control functions, the processor being coupled to the memory;

software or firmware executed by the processor to service HTTP protocol and to generate HTML files;

input/output circuitry coupled to the processor; and

wherein the apparatus is embedded in the printer.

51. (New) The apparatus of claim 50 wherein the memory and the processor perform image rendering functions.

52. (New) The apparatus of claim 50 wherein the web page includes hyperlinks for printer support functions, including information regarding ordering printer supplies.

53. (New) The apparatus of claim 50 wherein the printer web page includes a printer name, an administrator, and a location for the printer.

54. (New) The apparatus of claim 50 further comprising printer-specific hardware coupled to the processor.

55. (New) The apparatus of claim 50 wherein the processor also performs control and information monitoring and logging functions.

56. (New) The apparatus of claim 50 wherein the processor executes communication software or firmware to drive the input/output circuitry.

57. (New) The apparatus of claim 50 wherein the memory and the processor are on a single integrated circuit chip.

58. (New) The apparatus of claim 50 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.

59. (New) The apparatus of claim 50 wherein the web page is stored in the memory in HTML format.
60. (New) The apparatus of claim 50 wherein the web page is generated on the fly.
61. (New) The apparatus of claim 50 wherein the input/output circuitry is cellular transmitter/receiver circuitry.
62. (New) The apparatus of claim 50 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.
63. (New) The apparatus of claim 50 wherein the web page includes a hyperlink to an updated manual.
64. (New) The apparatus of claim 50 wherein the web page includes a hyperlink to an updated software driver routine.
65. (New) An apparatus for providing a web page for a fax machine, the apparatus comprising:
 - a memory configured to perform fax machine-specific functions and web server functions, wherein the web server functions include generating a web page that enables fax machine control functions;
 - a processor configured to perform fax machine-specific functions and web server functions, wherein the web server functions include generating the web page that enables fax machine control functions, the processor being coupled to the memory;

software or firmware executed by the processor to service HTTP protocol and to generate HTML files;

input/output circuitry coupled to the processor; and

wherein the apparatus is embedded in the fax machine.

66. (New) The apparatus of claim 65 further comprising fax machine-specific hardware coupled to the processor.

67. (New) The apparatus of claim 65 wherein the processor also performs control and information monitoring and logging functions.

68. (New) The apparatus of claim 65 wherein the processor executes communication software or firmware to drive the input/output circuitry.

69. (New) The apparatus of claim 65 wherein the memory and the processor are on a single integrated circuit chip.

70. (New) The apparatus of claim 65 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.

71. (New) The apparatus of claim 65 wherein the web page is stored in the memory in HTML format.

72. (New) The apparatus of claim 65 wherein the web page is generated on the fly.

73. (New) The apparatus of claim 65 wherein the input/output circuitry is cellular transmitter/receiver circuitry.
74. (New) The apparatus of claim 65 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.
75. (New) The apparatus of claim 65 wherein the web page includes a hyperlink to an updated manual.
76. (New) The apparatus of claim 65 wherein the web page includes a hyperlink to an updated software driver routine.
77. (New) An apparatus for providing a web page for a video player that reads video and audio information from a storage medium, the apparatus comprising:
- a memory configured to perform video player-specific functions and web server functions, wherein the web server functions include generating a web page that enables video player control functions;
 - a processor configured to perform video player-specific functions and web server functions, wherein the web server functions include generating the web page that enables video player control functions, the processor being coupled to the memory;
 - software or firmware executed by the processor to service HTTP protocol and to generate HTML files;
 - input/output circuitry coupled to the processor; and
 - wherein the apparatus is embedded in the video player.
78. (New) The apparatus of claim 77 wherein the storage medium is an optical storage medium.

79. (New) The apparatus of claim 77 wherein the storage medium is magnetic tape.

80. (New) The apparatus of claim 77 wherein the video player is a video player/recorder that reads and writes video and audio information to an optical storage medium.

81. (New) The apparatus of claim 77 wherein the video player is a video player/recorder that reads and writes video and audio information to a magnetic tape storage medium.

82. (New) The apparatus of claim 77 further comprising video player-specific hardware coupled to the processor.

83. (New) The apparatus of claim 77 further comprising video player-specific hardware coupled to the processor, wherein the video player-specific hardware includes a motor.

84. (New) The apparatus of claim 77 wherein the processor also performs control and information monitoring and logging functions.

85. (New) The apparatus of claim 77 wherein the processor executes communication software or firmware to drive the input/output circuitry.

86. (New) The apparatus of claim 77 wherein the memory and the processor are on a single integrated circuit chip.

87. (New) The apparatus of claim 77 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.
88. (New) The apparatus of claim 77 wherein the web page is stored in the memory in HTML format.
89. (New) The apparatus of claim 77 wherein the web page is generated on the fly.
90. (New) The apparatus of claim 77 wherein the input/output circuitry is cellular transmitter/receiver circuitry.
91. (New) The apparatus of claim 77 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.
92. (New) The apparatus of claim 77 wherein the web page includes a hyperlink to an updated manual.
93. (New) The apparatus of claim 77 wherein the web page includes a hyperlink to an updated software driver routine.
94. (New) An apparatus for providing a web page for a television, the apparatus comprising:

a memory configured to perform television-specific functions and web server functions, wherein the web server functions include generating a web page that enables television control functions;

a processor configured to perform television-specific functions and web server functions, wherein the web server functions include generating the web page that enables television control functions, the processor being coupled to the memory;

software or firmware executed by the processor to service HTTP protocol and to generate HTML files;

input/output circuitry coupled to the processor; and

wherein the apparatus is embedded in the television.

95. (New) The apparatus of claim 94 further comprising television-specific hardware coupled to the processor.

96. (New) The apparatus of claim 94 wherein the processor also performs control and information monitoring and logging functions.

97. (New) The apparatus of claim 94 wherein the processor executes communication software or firmware to drive the input/output circuitry.

98. (New) The apparatus of claim 94 wherein the memory and the processor are on a single integrated circuit chip.

99. (New) The apparatus of claim 94 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.

100. (New) The apparatus of claim 94 wherein the web page is stored in the memory in HTML format.

101. (New) The apparatus of claim 94 wherein the web page is generated on the fly.

102. (New) The apparatus of claim 94 wherein the input/output circuitry is cellular transmitter/receiver circuitry.

103. (New) The apparatus of claim 94 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.

104. (New) The apparatus of claim 94 wherein the web page includes a hyperlink to an updated manual.

105. (New) The apparatus of claim 94 wherein the web page includes a hyperlink to an updated software driver routine.

106. (New) An apparatus for providing a web page for a thermostat, the apparatus comprising:

a memory configured to perform thermostat-specific functions and web server functions, wherein the web server functions include generating a web page that enables thermostat control functions;

a processor configured to perform thermostat-specific functions and web server functions, wherein the web server functions include generating the web page

that enables thermostat control functions, the processor being coupled to the memory;

software or firmware executed by the processor to service HTTP protocol and to generate HTML files;

input/output circuitry coupled to the processor; and

wherein the apparatus is embedded in the thermostat.

107. (New) The apparatus of claim 106 further comprising thermostat-specific hardware coupled to the processor.

108. (New) The apparatus of claim 106 wherein the processor also performs control and information monitoring and logging functions.

109. (New) The apparatus of claim 106 wherein the processor executes communication software or firmware to drive the input/output circuitry.

110. (New) The apparatus of claim 106 wherein the memory and the processor are on a single integrated circuit chip.

111. (New) The apparatus of claim 106 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.

112. (New) The apparatus of claim 106 wherein the web page is stored in the memory in HTML format.

113. (New) The apparatus of claim 106 wherein the web page is generated on the fly.

114. (New) The apparatus of claim 106 wherein the input/output circuitry is cellular transmitter/receiver circuitry.

115. (New) The apparatus of claim 106 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.

116. (New) The apparatus of claim 106 wherein the web page includes a hyperlink to an updated manual.

117. (New) The apparatus of claim 106 wherein the web page includes a hyperlink to an updated software driver routine.

118. (New) An apparatus for providing a web page for a refrigerator, the apparatus comprising:

a memory configured to perform refrigerator-specific functions and web server functions, wherein the web server functions include generating a web page that enables refrigerator control functions;

a processor configured to perform refrigerator-specific functions and web server functions, wherein the web server functions include generating the web page that enables refrigerator control functions, the processor being coupled to the memory;

software or firmware executed by the processor to service HTTP protocol and to generate HTML files;

input/output circuitry coupled to the processor; and

wherein the apparatus is embedded in the refrigerator.

119. (New) The apparatus of claim 118 further comprising refrigerator-specific hardware coupled to the processor.

120. (New) The apparatus of claim 118 wherein the processor also performs control and information monitoring and logging functions.

121. (New) The apparatus of claim 118 wherein the processor executes communication software or firmware to drive the input/output circuitry.

122. (New) The apparatus of claim 118 wherein the memory and the processor are on a single integrated circuit chip.

123. (New) The apparatus of claim 118 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.

124. (New) The apparatus of claim 118 wherein the web page is stored in the memory in HTML format.

125. (New) The apparatus of claim 118 wherein the web page is generated on the fly.

126. (New) The apparatus of claim 118 wherein the input/output circuitry is cellular transmitter/receiver circuitry.

127. (New) The apparatus of claim 118 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.

128. (New) The apparatus of claim 118 wherein the web page includes a hyperlink to an updated manual.

129. (New) The apparatus of claim 118 wherein the web page includes a hyperlink to an updated software driver routine.

130. (New) An apparatus for providing a web page for a washing machine, the apparatus comprising:

a memory configured to perform washing machine-specific functions and web server functions, wherein the web server functions include generating a web page that enables washing machine control functions;

a processor configured to perform washing machine-specific functions and web server functions, wherein the web server functions include generating the web page that enables washing machine control functions, the processor being coupled to the memory;

software or firmware executed by the processor to service HTTP protocol and to generate HTML files;

input/output circuitry coupled to the processor; and

wherein the apparatus is embedded in the washing machine.

131. (New) The apparatus of claim 130 further comprising washing machine-specific hardware coupled to the processor.

132. (New) The apparatus of claim 130 wherein the processor also performs control and information monitoring and logging functions.

133. (New) The apparatus of claim 130 wherein the processor executes communication software or firmware to drive the input/output circuitry.

134. (New) The apparatus of claim 130 wherein the memory and the processor are on a single integrated circuit chip.

135. (New) The apparatus of claim 130 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.

136. (New) The apparatus of claim 130 wherein the web page is stored in the memory in HTML format.

137. (New) The apparatus of claim 130 wherein the web page is generated on the fly.

138. (New) The apparatus of claim 130 wherein the input/output circuitry is cellular transmitter/receiver circuitry.

139. (New) The apparatus of claim 130 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.

140. (New) The apparatus of claim 130 wherein the web page includes a hyperlink to an updated manual.

141. (New) The apparatus of claim 130 wherein the web page includes a hyperlink to an updated software driver routine.

142. (New) An apparatus for providing a web page for a disk drive, the apparatus comprising:

a memory configured to perform disk drive-specific functions and web server functions, wherein the web server functions include generating a web page that enables disk drive control functions;

a processor configured to perform disk drive-specific functions and web server functions, wherein the web server functions include generating the web page that enables disk drive control functions, the processor being coupled to the memory;

software or firmware executed by the processor to service HTTP protocol and to generate HTML files;

input/output circuitry coupled to the processor; and

wherein the apparatus is embedded in the disk drive.

143. (New) The apparatus of claim 142 further comprising disk drive-specific hardware coupled to the processor.

144. (New) The apparatus of claim 142 wherein the processor also performs control and information monitoring and logging functions.

145. (New) The apparatus of claim 142 wherein the processor executes communication software or firmware to drive the input/output circuitry.

146. (New) The apparatus of claim 142 wherein the memory and the processor are on a single integrated circuit chip.

147. (New) The apparatus of claim 142 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.

148. (New) The apparatus of claim 142 wherein the web page is stored in the memory in HTML format.

149. (New) The apparatus of claim 142 wherein the web page is generated on the fly.

150. (New) The apparatus of claim 142 wherein the input/output circuitry is cellular transmitter/receiver circuitry.

151. (New) The apparatus of claim 142 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.

152. (New) The apparatus of claim 142 wherein the web page includes a hyperlink to an updated manual.

153. (New) The apparatus of claim 142 wherein the web page includes a hyperlink to an updated software driver routine.

154. (New) An apparatus for providing a web page for an oscilloscope, the apparatus comprising:

a memory configured to perform oscilloscope-specific functions and web server functions, wherein the web server functions include generating a web page that enables oscilloscope control functions;

a processor configured to perform oscilloscope-specific functions and web server functions, wherein the web server functions include generating the web page that enables oscilloscope control functions, the processor being coupled to the memory;

software or firmware executed by the processor to service HTTP protocol and to generate HTML files;

input/output circuitry coupled to the processor; and

wherein the apparatus is embedded in the oscilloscope.

155. (New) The apparatus of claim 154 further comprising oscilloscope-specific hardware coupled to the processor.

156. (New) The apparatus of claim 154 wherein the processor also performs control and information monitoring and logging functions.

157. (New) The apparatus of claim 154 wherein the processor executes communication software or firmware to drive the input/output circuitry.

158. (New) The apparatus of claim 154 wherein the memory and the processor are on a single integrated circuit chip.

159. (New) The apparatus of claim 154 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.

160. (New) The apparatus of claim 154 wherein the web page is stored in the memory in HTML format.

161. (New) The apparatus of claim 154 wherein the web page is generated on the fly.

162. (New) The apparatus of claim 154 wherein the input/output circuitry is cellular transmitter/receiver circuitry.

163. (New) The apparatus of claim 154 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.

164. (New) The apparatus of claim 154 wherein the web page includes a hyperlink to an updated manual.

165. (New) The apparatus of claim 154 wherein the web page includes a hyperlink to an updated software driver routine.

166. (New) An apparatus for providing a web page for a spectrum analyzer, the apparatus comprising:

a memory configured to perform spectrum analyzer-specific functions and web server functions, wherein the web server functions include generating a web page that enables spectrum analyzer control functions;

a processor configured to perform spectrum analyzer-specific functions and web server functions, wherein the web server functions include generating the web

page that enables spectrum analyzer control functions, the processor being coupled to the memory;

software or firmware executed by the processor to service HTTP protocol and to generate HTML files;

input/output circuitry coupled to the processor; and

wherein the apparatus is embedded in the spectrum analyzer.

167. (New) The apparatus of claim 166 further comprising spectrum analyzer-specific hardware coupled to the processor.

168. (New) The apparatus of claim 166 wherein the processor also performs control and information monitoring and logging functions.

169. (New) The apparatus of claim 166 wherein the processor executes communication software or firmware to drive the input/output circuitry.

170. (New) The apparatus of claim 166 wherein the memory and the processor are on a single integrated circuit chip.

171. (New) The apparatus of claim 166 wherein the memory and the processor are on a single integrated circuit chip, and wherein the input/output circuitry includes hardware that is on the single integrated circuit chip.

172. (New) The apparatus of claim 166 wherein the web page is stored in the memory in HTML format.

173. (New) The apparatus of claim 166 wherein the web page is generated on the fly.

174. (New) The apparatus of claim 166 wherein the input/output circuitry is cellular transmitter/receiver circuitry.

175. (New) The apparatus of claim 166 wherein the input/output circuitry is Ethernet input/output circuitry that is used to transfer HTML files.

176. (New) The apparatus of claim 166 wherein the web page includes a hyperlink to an updated manual.

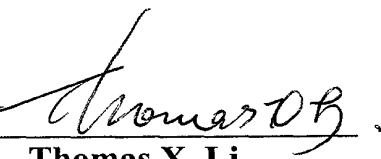
177. (New) The apparatus of claim 166 wherein the web page includes a hyperlink to an updated software driver routine.

REMARKS

The specification has been amended to correct some typographical errors. New claims have been added to cover various embodiments of the invention. No new matter has been added. Applicants respectfully request allowance of this application.

Respectfully submitted,

Chandrasekar Venkatraman, et al.

BY: 

Thomas X. Li

Reg. No. **37,079**

Date: **May 24, 2001**

Tel. No.: **(650) 857-5972**

Hewlett-Packard Company
Legal Department, M/S 20BN
P.O. Box 10301
Palo Alto, CA 94303-0890

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Page 5, first paragraph

A solution for providing widely accessible, low cost and enhanced user interface functions for a device is disclosed. The solution involves embedding web access functionality into the device including a web server that provides a device web page. The device includes an embedded network interface that enables access to the device web page by a web browser. A user of the web browser accesses the user interface functions for the device through the device web page. The web server functionality may be implemented with existing circuitry in a device, such as an [exiting] existing processor, memory, and input/output circuitry that normally perform device-specific functions, thereby avoiding the extra cost and space required for dedicated web server hardware.

Page 11, second paragraph

In one embodiment, the device 10 is a printer device wherein the processor 200 and the memory 210 [preform] perform image rendering functions and the device-specific hardware 300 includes printer hardware and associated circuitry and wherein the input/output circuitry 220 provides network access to the printer device 10. The web server functionality is embedded into the printer device 10 by providing software or firmware for the processor 200 and by utilizing space available in the memory 210 and by using the existing input/output circuitry 220 such as Ethernet circuitry to transfer HTML files.

Page 12, second paragraph

In yet another embodiment, the device 10 is a washing machine wherein the processor 200 and the memory 210 [preform] perform functions for controlling wash cycles. The device-specific hardware 300 includes hardware such as motors, valves, sensors, and associated circuitry. The web server functionality is embedded into the washing machine 10 by providing software or firmware for the processor 200 and by utilizing space available in the memory 210 and by adding the input/output circuitry to the [video] device 10.

Page 20, first paragraph

The web page 18 for the printer may also include manuals, parts lists, and other associated publications. These publications may be stored within the device 10 in, for example, a nonvolatile memory, or may be referenced elsewhere via hyperlinks contained in the web page 18. These publications contain dynamic information such as updated manuals as well as new and updated software driver routines for the video device 10.